OPC Unified Architecture –
Del 8: Dataåtkomst

OPC Unified Architecture –
Part 8: Data Access

Som svensk standard gäller europastandarden EN 62541-8:2015. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62541-8:2015.

Nationellt förord

Europastandarden EN 62541-8:2015

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 62541-8, Second edition, 2015 - OPC Unified Architecture - Part 8: Data Access**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 62541-8, utgåva 1, 2012, gäller ej fr o m 2018-04-29.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler
för bl a mätning, säkerhet och provning och för utförande, skötsel och
dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga
och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans
för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och
metoder som åstadkommer den elsäkerhet som föreskrivs av svenska
myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i
Sverige och samordnar svensk medverkan i internationell och europeisk
standardisering. SEK är en ideell organisation med frivilligt deltagande från
svenska myndigheter, företag och organisationer som vill medverka till och
påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska
kommittéer och stödjer svenska experters medverkan i internationella
och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och
europeiskt samarbete. SEK är svensk nationalkommitté av International
Electrotechnical Commission (IEC) och Comité Européen de Normalisation
Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper
bestående av ett antal tekniska kommittéer som speglar hur arbetet inom
IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska
organisationer, företag, institutioner, myndigheter och statliga verk. Den
årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs
standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att
påverka framtida standarder och får tidig tillgång till information och
dokumentation om utvecklingen inom sitt teknikområde. Arbetet och
kontakterna med kollegor, kunder och konkurrenter kan gynnsamt
påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen
kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta
SEKs kansli för mer information.

<div align="center">

SEK Svensk Elstandard

Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62541-8

May 2015

English Version

OPC unified architecture - Part 8: Data Access
(IEC 62541-8:2015)

Architecture unifiée OPC - Partie 8: Accès aux données
(IEC 62541-8:2015)

OPC Unified Architecture - Teil 8: Zugriff auf
Automatisierungsdaten
(IEC 62541-8:2015)

This European Standard was approved by CENELEC on 2015-04-29. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 62541-8:2015 E

SEK Svensk Elstandard

Foreword

The text of document 65E/381/CDV, future edition 2 of IEC 62541-8, prepared by SC 65E "Devices and integration in enterprise systems", of IEC/TC 65 "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62541-8:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement   (dop) 2016-01-29

- latest date by which the national standards conflicting with the document have to be withdrawn   (dow) 2018-04-29

This document supersedes EN 62541-8:2011.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

Endorsement notice

The text of the International Standard IEC 62541-8:2015 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

Normative references to international publications
with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1   When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2   Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC/TR 62541-1	-	OPC unified architecture - Part 1: Overview and concepts	CLC/TR 62541-1	-
IEC 62541-3	-	OPC unified architecture - Part 3: Address Space Model	EN 62541-3	-
IEC 62541-4	-	OPC Unified Architecture - Part 4: Services	EN 62541-4	-
IEC 62541-5	-	OPC unified architecture - Part 5: Information Model	EN 62541-5	-
UNECE 20	-	Codes for Units of Measure Used in International Trade	-	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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OPC UNIFIED ARCHITECTURE –

Part 8: Data Access

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

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International Standard IEC 62541-8 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation.

This second edition cancels and replaces the first edition published in 2011. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) Clarified that deadband has to be between 0.0 and 100.0. Violations result in error Bad_DeadbandFilterInvalid (6.2)

b) Added VariableTypes handling ArrayItems and DataTypes supporting this, including complex number types. These data types are required for complex analyzer devices but seem useful for other domains as well.

The text of this standard is based on the following documents:

CDV	Report on voting
65E/381/CDV	65E/407/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 62541 series, published under the general title *OPC Unified Architecture*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

OPC UNIFIED ARCHITECTURE –

Part 8: Data Access

1   Scope

This part of IEC 62451 is part of the overall OPC Unified Architecture (OPC UA) standard series and defines the information model associated with Data Access (DA). It particularly includes additional *VariableTypes* and complementary descriptions of the *NodeClass*es and *Attributes* needed for Data Access, additional *Properties,* and other information and behaviour.

The complete address space model, including all *NodeClass*es and *Attributes* is specified in IEC 62541-3. The services to detect and access data are specified in IEC 62541-4.

2   Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC TR 62541-1, *OPC Unified Architecture - Part 1: Overview and Concepts*

IEC 62541-3, *OPC unified architecture - Part 3: Address Space Model*

IEC 62541-4, *OPC unified architecture - Part 4: Services*

IEC 62541-5, *OPC unified architecture - Part 5: Information Model*

UN/CEFACT: **UNECE Recommendation N° 20**, *Codes for Units of Measure Used in International Trade*, available at http://www.unece.org/cefact/recommendations/rec_index.htm